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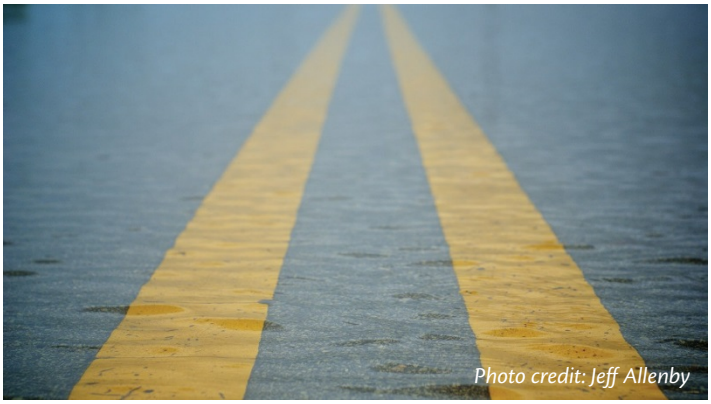
MARYLAND COAST SMART COUNCIL

2017 ANNUAL REPORT

Prepared for the members of the
Maryland Coast Smart Council

Photo credit: Assateague State Park staff



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MARYLAND

Larry Hogan,

Governor Boyd K. Rutherford, Lt. Governor Mark J. Belton, Secretary

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Larry Hogan, Governor

Mark Belton, Secretary

The Maryland Coast Smart Council is chaired by the secretary of the Maryland Department of Natural Resources and supported by department staff through funding from the National Oceanic and Atmospheric Administration. Other state agencies represented on the council include the Maryland departments of Budget and Management, Commerce, Environment, Legislative Services, Planning, and Transportation, the Maryland Emergency Management Administration, the Critical Areas Commission, and the University System of Maryland.

Financial assistance provided by the Coastal Zone Management Act of 1972, as amended, administered by the Offi e of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration (NOAA). A publication (or report) of the Maryland Coastal Zone Management Program, Department of Natural Resources pursuant to NOAA Award No. NA17NOS4190170.

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4/2017 DNR 14-1152016-797

MAKING MARYLAND RESILIENT

A Summary of FY 2017 Actions to Reduce Risk

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INTRODUCTION

Chapter 415 of the 2014 Laws of Maryland (HB 615), established the Coast Smart Council (the council) in the Department of Natural Resources (DNR). One of the primary tasks of the council, staffed by DNR and comprised of private sector and state agency membership, was to establish Coast Smart Siting and Design Criteria (criteria) to address sea level rise and coastal flood impacts on state funded capital projects.

The 2014 legislation also required state capital projects that include the construction of a new structure or the reconstruction of a structure with substantial damage to be constructed or reconstructed in compliance with the criteria approved by the council. The criteria, summarized below provides guidelines and directives applicable to the preliminary planning and construction of a proposed capital project; requires the lowest fl elevation of each structure located within a Special Flood Hazard Area is built at an elevation of at least 2 feet above the base fl elevation; and establishes a process to allow a unit of state government to obtain a waiver from complying with the requirements.

COAST SMART CONSTRUCTION PROGRAM

Siting Guidelines	*Design Guidelines*
New State structures, the reconstruction of substantially damaged State structures, and/or the other new major infrastructure projects shall be avoided within areas likely to be inundated by sea level rise within the next 50 years.	New State structures, the reconstruction of substantially damaged State structures, and/or other new major infrastructure projects shall be designed to avoid or minimize future impacts over the anticipated design life of a project.
New State "critical or essential facilities" shall not be located within Special Flood Hazard Areas designated under the NFIP and should be protected from damage and loss of access as a result of a 500-year flood.	New State structures and the reconstruction or rehabilitation of substantially damaged State structures located in Special Flood Hazard Areas shall be constructed with a minimum of two (2) feet of freeboard above the 100-year base flood elevation defined by the NFIP.
Ecological features that may serve to buffer a project from the impacts of future sea level rise, coastal flooding or storm surge or that support general climate adaptation practices, shall be identified, protected and maintained.	State structures serving transportation purposes that are not water dependent or dependent on integral infrastructure shall be constructed with a minimum of two (2) feet of freeboard above the 100-year base flood elevation, as defined by NFIP.
Exceptions to these guidelines may be considered, provided that is can be demonstrated that projects have been designed to increase resiliency to future impacts.	Flooding potential shall be considered when choosing building materials for all structural projects, including minor improvements or maintenance and repair.
	Structures and infrastructure proposed within a Limit of Moderate Wave Action boundary as mapped under the NFIP, shall be designed in compliance with construction standards applicable to areas subject to inundation by the 1-percent-annual-flood event and storm-induced waves, called V Zones.
	Exceptions to these guidelines may be warranted based on consideration of certain factors established by the council.

Annual Reporting to the Council

The Coast Smart Construction Program (program), which became effective July 1, 2015, sets out the siting and design guidelines developed by the council and establishes the procedures and priorities for all state agencies that plan, budget, design or build facilities in areas vulnerable to coastal flooding and sea level rise.

Beginning on October 1, 2016, and for every year thereafter, all units of state government are to report to the council on individual state agency actions, which were undertaken within the previous fiscal year and related to the implementation of the program, including Categorical Exceptions and Waiver determinations.

It is intended that the council will review the program on an annual or "as necessary" basis to address issues which may occur as the building of state facilities and knowledge of Coast Smart building practices evolve. The Annual Report (report) helps the council evaluate the program and supports further development or refinement of criteria, categorical exceptions, general standards and procedures for applying and obtaining a waiver.

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SECTION I. INSTITUTIONALIZING COAST SMART SITING AND DESIGN CRITERIA INTO STATE PROGRAMS

Since July 1, 2015 state agencies have been working to incorporate the siting and design guidelines into appropriate planning, design and construction processes as a means to institutionalize the Coast Smart practices approved by the council.

Coast Smart Assessment & Certificate

After meeting with Treasurer Nancy Kopp regarding the work of the Maryland Coast Smart Council, staff from the Maryland Department of Natural began developing the idea of a checklist or certificate to demonstrate that projects coming to the Board of Public Works (BPW) have complied with the Coast Smart guidelines. After meeting with the council twice, once with the BPW staff and holding several teleconferences and email exchanges among technical staff, the proposed product evolved into the Coast Smart Assessment & Certificate. This document, which built upon pre-existing Council documents (Appendix A – Glossary and Appendix B – Coast Smart Project Screening Checklist to the Coast Smart Construction Program (2015)), is intended to help Maryland state agency personnel and others understand and apply the Coast Smart Construction Program guidelines for various phases of their project to prevent or minimize the future impacts of coastal and riverine flooding, storm surge and sea level rise. It consists of three parts: I. Glossary and Useful Web-based Resources; II. Project Screening Checklist; and III. Coast Smart Certificate. The last page of the document, the Coast Smart Certificate, includes three stages of evaluation & certification: Initial Siting/Property Acquisition Siting, Design of Structure (Both New and Major Reconstruction) and Pre-Construction Certification. The document was approved with modifications on ------by the council (See Appendix B).

Incorporation of Coast Smart Guidelines into Waterway Construction Regulations

[Gary Setzer, MDE to add text summary]

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SECTION II. STATE AGENCY PROJECTS AND GRANTS AND LOANS ADMINISTERED BY STATE AGENCIES

The Department of Budget and Management annually produces the capital budget of the State of Maryland. The capital budget consists of state-owned capital projects, and grant and loan programs administered by state agencies and local capital projects. State capital projects are required to be constructed or renovated in compliance with Coast Smart siting and design criteria which address sea-level rise and coastal flood impacts on projects. In the event that a State-owned project is located in an area that is vulnerable to coastal flooding and sea level rise, the Office of Capital Budgeting (OCB), with the expertise of the Departments of Planning (MDP) and Natural Resources (DNR), verifies that Coast Smart siting and design criteria have been incorporated in project descriptions and facility program documents.

In order to comply with the Coast Smart siting and design requirements, OCB ascertains which projects are located in a Climate Change Impact Area and works with MDP and DNR to verify that the criteria have been incorporated into each project. In Fiscal Year 2017, only X projects were flagged in the Capital Budget using the Climate Change Impact Area overlay,. Below are short summaries describing these projects, their vulnerability and the actions taken to comply with the Coast Smart Construction Program. More detailed information is provided in Appendix C.

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SECTION III. CATEGORICAL EXCEPTIONS AND CRITERIA WAIVERS

The Coast Smart Construction Program includes provisions for State agencies to apply for Categorical Exceptions for certain project types and uses as well as to request Waivers from one or more of the specific siting and design criteria.

Categorical Exceptions:

Under the Categorical Exception provision, Agencies may determine certain projects and uses to be exempt from strict application of Coast Smart Construction Criteria, provided that it can be demonstrated that those projects have been designed to increase resiliency to future impacts. Categorical Exceptions currently include the following project types and uses:

- **Water-dependent uses.** Projects that require continued direct access to the water as an integral part of the use, or facilities that directly support water dependent uses.
- **Existing transportation assets.** Projects that support the continued function of existing transportation systems assets.
- **Passive public access.** Projects that provide either recreational or scenic access to water bodies or shoreline areas which, need to be within a flood zone for their purpose.
- **Historic structures.** The necessity of continued investment of state resources in properties individually listed or determined eligible for listing in the National Register of Historic Places or a contributing resource within a historic district listed or determined eligible for listing in the National Register.
- **Temporary structures or uses.** Structures intended to be in place for less than 180 consecutive days in any given calendar year or will be removed at the end of a construction project.
- **Stabilization projects.** Actions to secure and maintain assets, structures, and natural and cultural resources to prevent additional damage and to prevent future resource/facility damage; efforts to mitigate a safety or environmental hazard; mold remediation; facility weatherization; silt fencing; and minor repairs and restorations.
- **Emergency uses.** Structures essential to save lives and protect property, public health and safety.

While excepted projects are exempt from strict application of Coast Smart Construction Criteria, they are required to employ Coast Smart principles and practices, wherever practicable. Agencies using a categorical exemption are also required to submit documentation and reporting materials on an annual basis. Reporting documents will be used by the council for the purposes of further development and/or refinement of Coast Smart Siting and Design Criteria, Categorical Exceptions, or general standards and procedures for applying and obtaining a waiver.

If needed, agencies may request a formal consultation with the Coast Smart Council for the purposes of reviewing a proposed project or seek a determination of compliance with the Categorical Exception provision listed above.

In FY17, no agencies have reported project types or uses as Categorical Exceptions. In addition, no agencies have requested formal consultation with the council for projects funded in fiscal year 2017.

Coast Smart Criteria Waivers:

Any unit of state government may request a waiver from one or more of the specific Coast Smart Siting or Design Criteria. Waiver requests are reviewed for approval by the Smart Growth Coordinating Committee in consultation with the council. Agencies seeking Criteria Waivers are to use the Waiver Request and the Project Screening Checklist

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forms developed by the council. On an annual basis, the waiver requests and reviews will be included in the Smart Growth Subcabinet report in a section documenting any coordinating committee decision regarding Coast Smart Construction Policy. Similarly, waiver requests and decisions will be reported annually to the council in this report. In FY17, no projects applied for consideration:

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SECTION IV. STATE AGENCY ACTIONS AND INITIATIVES

In addition to implementing Coast Smart guidelines for the construction of new State structures, or the reconstruction or rehabilitation of substantially damaged State structures, State agencies provide multiple technical and financial assistance programs to help communities assess their vulnerability to coastal flood hazards, identify natural and nature-based features that improve coastal resiliency, and adopt Coast Smart practices into project planning and infrastructure improvements to mitigate coastal flooding, storm surge and sea-level rise.

Resiliency through Restoration Initiative

Over the past ten years, Maryland has experienced seven weather-related events warranting Presidential Disaster declarations, including five coastal flood events totaling approximately $103 million in economic damage. Recognizing that coastal habitats help buffer communities from these climate-related impacts, the Maryland Department of Natural Resources' Chesapeake and Coastal Service (CCS) launched a new initiative in July 2017 to support natural and nature-based adaptation strategies. The Resiliency through Restoration Initiative, funded through the State Capital Budget, provides technical and financial assistance to restore, enhance and create coastal habitat with the goal of protecting Maryland communities and public resources from extreme weather and climate-related events. Year one of the Initiative will lead to the design of six innovative and climate-resilient living shoreline and coastal restoration projects in five jurisdictions to demonstrate how natural and nature-based features can reduce risk at different scales. Construction of these resiliency projects is expected in years 2 and 3 of the Initiative. CCS staff will conduct monitoring to track the overall performance of demonstration projects and undertake adaptive management techniques to ensure project success over the long term. CCS staff will also support communication and education activities to share best practices and successes with practitioners and the general public.

Greater Baltimore Wilderness Coalition

The Greater Baltimore Wilderness Coalition (GBWC) is a partnership of public, private, and nonprofit organizations working through our collective impact model to connect people to greenspaces through our four pillars of ***equity***, ***discovery***, ***biodiversity***, **and** ***resilience***. Our Mission is to improve the quality of life by identifying, restoring, enhancing and protecting an interconnected network of lands and waters supporting healthy ecosystems and communities to benefit the people and wildlife of central Maryland. As a backbone organization for efforts in the Greater Baltimore region we support collaborative projects, initiatives, and strategic planning that will help each partner increase value to their work.

GBWC addresses resiliency in the following manner: To improve the region's capacity to achieve lasting economic vitality, Greater Baltimore Wilderness Coalition's partners will seek to mitigate impacts of climate change including sea level rise, flooding, stronger coastal storms, warmer temperatures, and

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drought through a protected regional green infrastructure network including forests, wetlands, parks, rain, gardens, and urban tree canopy. This network will absorb rainfall, store water, reduce flooding, and provide additional community benefits, such as cleaner air, space for recreation, and relief from urban heat.

In addition to supporting many on-the-ground demonstration projects that include the Druid Heights community greening Peace Park initiative, Harford County green infrastructure plan, Urban Bird Treaty City program and Baltimore: Rivers to Harbor Urban Wildlife Refuge Partnership, the Coalition also sponsors workshops to convene practitioners for collective learning and meaningful and effective dialogue.

Our next workshop event, ***Nature Cities Forum: Addressing climate change and supporting vibrant communities through Green Infrastructure***, is scheduled for ***November 16th, 2017***. This is a one day in-person forum in Central Maryland to share best practices, data and inspiration to support existing and new programs and collaborations that:

- Help communities become more resilient to climate change impacts.
- Support more equitable opportunities for residents to access green space
- Engage in cutting edge Green Infrastructure design
- Increase children's daily connection to nature based activities.

Hold the date now and stay tuned for more information as it is developed.

Please visit the GBWC website at
http://www.baltimorewilderness.org/
for more information

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SECTION V. RECOMMENDATIONS FOR FY 2018

1. Continue Research, Communication and Outreach Regarding NNBF Integration, Implementation and Performance ~ There is a need for continued research and transdisciplinary dialogue to better understand and communicate how natural and nature-based features (NNBF) individually and collectively contribute to Climate adaptability and resilience. Further, there is a need to understand and share the full menu of NNBF options available to project managers, funders and other stakeholders. Once research is completed, there is a need to communicate those findings to state agencies and others charged with designing and building structures and infrastructure in vulnerable areas. It is also recommended that pilot projects incorporate the integration of multiple natural and natural-based features and that ongoing monitoring programs monitor their overall performance and convey success stories and lessons learned in manner that can be easily understood by the general public.

2. Better Harmonize and Communicate State and Local Climate Adaptation and Resilience Efforts ~ The Coast Smart Council is committed to leading by example through its guidelines and working with and learning from local government and the development community in helping Maryland become more adaptive and resilient to the challenges of Climate Change. Still, there are some ongoing challenges in implementing these goals, including:

1) How can we better communicate how the state government Coast Smart Council relates to the Coast Smart Program, which is tailored for local governments?
2) How can each program support and improve the other?
3) What can local government learn from the Council and what can the Council learn from local government?
4) How might this exchange be facilitated?

The Council should consider how to address these and other issues to better harmonize State and local efforts with Climate adaptation and resilience.

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SECTION VI. APPENDICES

APPENDIX A - COAST SMART COUNCIL MEMBERS

APPENDIX B - COAST SMART ASSESSMENT& CERTIFICATE

APPENDIX C – PROJECTS COMPLYING WITH COAST SMART CONSTRUCTION PROGRAM

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APPENDIX A - COAST SMART COUNCIL MEMBERS

Chair

Mark J. Belton
Secretary
Maryland Department of Natural Resources
580 Taylor Ave., C4
Annapolis, MD 21401
Phone: 410-260-8104
mark.belton@maryland.gov
http://dnr.maryland.gov/Pages/default.aspx

Members

Michael Bayer, AICP
Manager, Infrastructure and Development
Maryland Dept. of Planning
301 West Preston Street, Suite 1101
Baltimore, MD 21201
Phone: 410-767-7179
Email: michael.bayer1@maryland.gov
http://planning.maryland.gov/

Sepehr Baharlou, P.E. Principal
BayLand Consultants & Designers, Inc. 7455
New Ridge Road, Suite T Hanover, MD 21076
Phone: 410-694-9401
Email: sbaharlou@baylandinc.com
http://www.baylandinc.com/

Dave Nemazie, Chief of Staff (acting
for Dr. Donald Boesch, President)
University of Maryland
Center for Environmental Science
P.O. Box 775 Cambridge,
MD 21613
Phone: 410-221-2001
Email:nemazie@umces.edu
http://www.umces.edu/

Fiona Burns
Budget Analyst
Office of Capital Budgeting
Maryland Department of Budget and Management
301 W. Preston Street, Suite 1209
Baltimore, MD 21201
Phone: 410- 767-4526
Email: fiona.burns@maryland.gov
http://dbm.maryland.gov/Pages/home.aspx

Gary Setzer
Advisor for Office of the Secretary
Maryland Department of Environment
1800 Washington Blvd.
Baltimore, MD 21230
Phone: 410-537-3744
Email:gary.setzer@maryland.gov
http://www.mde.maryland.gov

DRAFT

Chris Elcock
Senior Associate
GWWO Inc., Architects
800 Wyman Park Drive, Suite 30D
Baltimore, MD 21211
Phone: 410-332-1009
Email: celcock@gwwoinc.com
Web: http://www.gwwoinc.com/

Dr. Gerry E. Galloway, Jr.
Professor
University of Maryland, College Park
1173 Glenn L. Martin Hall
College Park, MD 20742
Phone: 301-405-1341
Email: gegallo@umd.edu
http://www.civil.umd.edu/cdr/capabilities

Sandy Hertz
Assistant Director
Office of Environment
Maryland Department of Transportation
7201 Corporate Center Drive
Hanover, Maryland 21076
Phone: 410-865-2780
Email: shertz@mdot.state.md.us
http://www.mdot.maryland.gov/

Richard Higgins
Policy Planning & Inter-Agency Coordination Manager
Office of Policy, Research; and Government Affairs
Maryland Department of Commerce
401 E. Pratt Street, 17th. Floor
Baltimore, Md. 21202
Phone: 410-767-6353
Email: richard.higgins@maryland.gov
http://www.choosemaryland.org/Pages/default.aspx

Mostafa Izadi, P.E.
Capital Projects Manager
Department of General Services
301 West Preston Street
Baltimore, Maryland 21204
Phone: 410-767-4676
Email: mostafa.izadi@maryland.gov
http://www.dgs.maryland.gov/
Email: mostafa.izadi@maryland.gov
http://www.dgs.maryland.gov/

Chas Eby
Chief Strategy Officer & Director, Disaster Risk Reduction
Maryland Emergency Management Agency
5401 Rue Saint Lo Drive
Reisterstown, MD 21136
Phone: 410-517-3605
Email: chas.eby@maryland.gov
http://mema.maryland.gov/

Thomas J. Lawton
County Planner
Somerset County
11916 Somerset Ave.
Princess Anne, MD 21853
Phone: 410-651-1424
Email: tlawton@somersetmd.us
http://www.somersetmd.us

Kate Charbonneau
Acting Executive Director
Maryland Critical Area Commission
Chesapeake and Atlantic Coastal Bays
1804 West Street, Suite 100
Annapolis, MD 21401
Phone: 410-260-3460
Email: kate.charbonneau@maryland.gov
http://dnr.maryland.gov/criticalarea/Pages/default.aspx

Staff

Joe Abe
Coastal Policy Coordinator
Chesapeake and Coastal Service
Maryland Dept. of Natural Resources
580 Taylor Ave., E2
Annapolis, MD 21401
Phone: 410-260-8740
Email: joseph.abe@maryland.gov
http://dnr.maryland.gov/climateresilience/Pages/cs_Council.aspx

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APPENDIX B – COAST SMART ASSESSMENT & CERTIFICATE

[Insert approved final draft here.]

APPENDIX C – PROJECTS COMPLYING WITH COAST SMART CONSTRUCTION PROGRAM